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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/459,644	12/13/1999	TAKASHI TSUNODA	862.3166	1438

5514 7590 07/22/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 07/22/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/459,644

Applicant(s)

TSUNODA, TAKASHI

Examiner

Daniel J Chung

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31,33-35,37,38,40-42,44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31,33-35,37,38,40-42,44 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6-14-2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31,33-35,37-38,40-42 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokunaga et al (5,968,132) in view of Shishido (6,137,490), and further in view of Johnson et al (6,363,204).

Regarding claim 31, Tokunaga et al discloses that the claimed feature of a display device capable of displaying first and second windows ["a multi-window environment"] on a display screen, comprising: first receiving ["image receiving unit"; 44] means for receiving first image data, which is sequentially transferred from a first

external device in units of frames, to be displayed on the first window [i.e. 25-1]; second receiving means for receiving second image data, which is sequentially transferred from a second external device in units of frames, to be displayed on the second window; memory ["main storage"; 33] means for storing the first image data and the second image data (See col 14 line 24-25, col 14 line 40-42); reading control means for reading image data stored in memory means for displaying the image data on display screen; connecting means for connecting first receiving means and second receiving means to memory means, and storing control ["window managing unit"; 50g, "frame number adjusting signal outputting unit"] means for storing the first image data ["image data within focus window"] received by first receiving means and the second image data ["image data within no focus window"] in memory means through connecting means, wherein connecting means opens and closes a first connecting gate which connects second receiving means and memory means at predetermined intervals when the first window is an active window ["focusing window"], and opens and closes a second connecting gate which connects first receiving means and memory means at predetermined intervals when the second window is an active window. (See Fig 31, Fig 32, Fig 33, Fig 36, col 5 line 25-34, col 6 line 52-64, col 40 line 51-60, col 41 line 50-col 42 line 42, col 56 line 48-62, See claim 18, claim 25)

Tokunaga et al does not explicitly disclose that "connecting means" and "storing control means", as recited in claims. However, such limitations are shown in the teaching of Johnson et al. [i.e. 'first video source'; 502, 'second video source'; 504,

multiple windows; 508,510, as 'automatic pausing/resuming of one window upon activity of other window'] (See Abstract, Fig 3, Fig 5, Fig 7, col 4 line 21-57, col 6 line 64-col 7 line 53) It would have been obvious to one skilled in the art to incorporate the teaching of Johnson et al into the teaching of Tokunaga et al, in order to "minimizing computational load on a processor subsystem associated with the system while graceful management of the additional video sources is effected", (See Abstract, col 7 line 57-61 in Johnson et al), as such improvement is also advantageously desirable in the teaching of Tokunaga et al for the image data communication system with enhanced working efficiency.

Also, Tokunaga et al does not explicitly discloses that "opening/closing a first/second gates when the first/second window is an active window", as recited in claims. However, such limitations are shown in the teaching of Shishido. [i.e. 'SW unit' 16; 'CRT control unit' 15; 'input control unit' 14] (See Fig 8, col 1 line 56-col 2 line 5, col 6 line 61-col 7 line 24) It would have been obvious to one skilled in the art to incorporate the teaching of Shishido into the teaching of Tokunaga et al, in order to produce multiple display system at a high efficiency (See col 2 line 1-5 in Shishido), as such improvement is also advantageously desirable in the teaching of Tokunaga et al for the image data communication system with enhanced working efficiency.

Regarding claim 33, Tokunaga et al fails to teach that displays image data to be displayed on an active window at a higher luminance than a luminance of image data to be displayed on an inactive window. However, Shishido discloses that "changing the luminance of display of the first one of the display devices to a predetermined luminance level indicative of an inactive process, for changing the luminance of display of the second one of the display devices to a predetermined luminance level indicative of an active process." (See col 9 line 1-14, col 10 line 17-30) It would have been obvious to one skilled in the art to incorporate the teaching of Shishido into the teaching of Tokunaga et al, in order to provide efficient way to distinct between active window and inactive window, as such improvement is also advantageously desirable in the teaching of Tokunaga et al.

Regarding claim 34, Tokunaga et al discloses that a counter for outputting a signal when a counter value reaches a predetermined value, wherein connecting means opens and closes the first and second connecting gate on the basis of the signal output from counter. (See Fig 31, Fig 32, Fig 36, col 41 line 55-col 43 line 23, col 56 line 48-col 57 line 7)

Regarding claims 35,37-38,40-42 and 44-45, claims 35,37-38,40-42 and 44-45 are similar in scope to the claims 31 and 33-34, and thus the rejections to claims 31 and 33-34 hereinabove are also applicable to claims 35,37-38,40-42 and 44-45.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 31,35,38 and 42 are once again rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. (5,595,389)

Regarding claim 31, Johnson et al discloses that the claimed feature of a display device capable of displaying first and second windows on a display screen, comprising: first receiving means for receiving first image data, which is sequentially transferred from a first external device [502] in units of frames, to be displayed on the first window [i.e. "primary viewing surface"; 508]; second receiving means for receiving second image data, which is sequentially transferred from a second external device [504] in units of frames, to be displayed on the second window [i.e. "a secondary viewing surface"; 510]; memory ["storage unit"] means for storing the first image data and the second image data; reading control means for reading image data stored in memory means for displaying the image data on display screen; connecting means for connecting first receiving means and second receiving means to memory means, and

storing control means for storing the first image data received by first receiving means and the second image data in memory means through connecting means, wherein connecting means opens and closes a first connecting gate which connects second receiving means and memory means at predetermined intervals when the first window is an active window, and opens and closes a second connecting gate which connects first receiving means and memory means at predetermined intervals when the second window is an active window. [i.e. 'automatic pausing/resuming of one window upon activity of other window'] (See Abstract, Fig 3, Fig 5, Fig 7, col 4 line 21-57, col 6 line 64-col 7 line 53)

Regarding claims 35,38 and 42, claims 35,38 and 42 are similar in scope to the claim 31, and thus the rejections to claim 31 hereinabove is also applicable to claims 35,38 and 42.

Response to Arguments

Applicant's arguments with respect to claims 31,33-35,37-38,40-42 and 44-45 have been considered but are moot in view of the new ground(s) of rejection. Specifically, in response to applicant's argument that the cited references do not disclose "storing control means for storing first and second image data received from first and second external devices", the newly submitted reference [Johnson et al] clearly teaches such features. [i.e. 'first video source'; 502, 'second video source'; 504, multiple windows; 508,510, as 'automatic pausing/resuming of one window upon activity of other

window'] (See Abstract, Fig 3, Fig 5, Fig 7, col 4 line 21-57, col 6 line 64-col 7 line 53) Furthermore, although Shishido shows only one external storage device [4 in Fig 1], it would have been obvious to one skilled in the art to make separable external storage device for each of CRT, as such structure would provide a simplified data flows for multiple windows/screens environment. (See *Nerwin v. Erlichman*, 168 USPQ 177, 179 (PTO Bd. Of Int. 1969))

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (Central fax)

(703) 872-9314 (for Technology Center 2600 only)

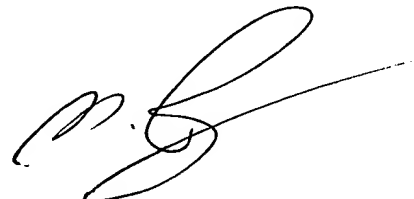
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc
July 5, 2004

A handwritten signature in black ink, appearing to read 'M. Razavi', with a long horizontal stroke extending to the right.

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600